PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Tomohiko ENDO, et al.

Group Art Unit

(Unassigned)

Application No.

(Natl. Phase of PCT/JP2004/010454)

Examiner

(Unassigned)

Filed

(Herewith)

Docket No.

476/131

For

GUIDING DEVICE FOR GUIDING VEHICLE TO

TARGET PLACE BY CONTROLLING THE STEERING

ANGLE

INFORMATION DISCLOSURE STATEMENT

COMMISSIONER FOR PATENTS
Customer Service Window
Randolph Bldg.
401 Dulany Street
Alexandria, VA 22314

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. 1449, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). The paragraphs marked below are applicable. It is believed that no fees other than those indicated below are due, but authorization is hereby given to charge any additional fees due, or to credit any overpayment, to deposit account 11-0600.

☐ 1. This Information Disclosure Statement is being filed (a) within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. §1.53(d), (b) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, (c)

before the mailing date of a first Office Action on the merits in the present application, OR (d) before the mailing of a first office action after filing of a request for continued examination. No certification or fee is required. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a final action, Notice of Allowance, or any action that otherwise closes prosecution. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1). I hereby certify that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2). Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached. 37 CFR §1.97(c)(2). П 3. This Information Disclosure Statement is being filed after the mailing date of a final action, Notice of Allowance or an action that otherwise closes prosecution, but before payment of the Issue Fee. Applicant(s) hereby request(s) that the Information Disclosure Statement be considered. Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the petition fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1). I hereby certify that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, no item contained in the Information Disclosure Statement was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

□ prese	4. nt spec	Relevance of the non-English language reference(s) is discussed in the ification.
	glish la	The reference(s) was/were cited in a counterpart foreign application. Inguage version of the foreign search report is attached for the aftermation.
□ refere		A concise explanation of the relevance of the non-English language appears in the Appendix attached hereto.
techni constr prese	ation N cal sub rued as nt appli ed app	The Examiner's attention is directed to co-pending U.S. Patent lo, filed, which is directed to related ject matter. The identification of this U.S. Patent Application is not to be a waiver of secrecy as to that application now or upon issuance of the cation as a patent. The Examiner is respectfully requested to consider lication and the art cited therein during examination of the present
identif secrec a pate	tached ication by as to ent. The	This application is one of a series of related applications, identified in Appendix, which are directed to related technical subject matter. The of those U.S. Patent Applications is not to be construed as a waiver of a those applications now or upon issuance of the present application as a Examiner is respectfully requested to consider the cited applications ited therein during the examination.
	ation N for an e	The reference(s) was/were cited by or submitted to the Office in parent to, which is relied earlier filing date under 35 U.S.C. §120. Thus, copies of these re not attached. 37 CFR §1.98(d).
☑ refere	10. nces.	English-language Abstracts are attached to the non-English language
	11.	No copies of U.S. references are required.
☑ Repoi	12. t, a cop	Other: Six of the references were cited in the International Search by of which, together with the Written Opinion, is enclosed.

Relevancy of References not Cited in Search Report

JP02-308313 A discloses a guiding device which guides a vehicle to move to a target position set by a user on a setting screen, in which the guiding is carried out by creating in real time a target track (orbit) from the current position of the vehicle to the target position while estimating the current position of the vehicle, and by controlling a steering angle based on the created target track.

JP10-264839 A discloses a guiding device which estimates the current position of the vehicle based on respective wheel speeds detected by wheel speed sensors and a yaw rate detected by a yaw rate sensor and judges whether the

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estimated current position of the vehicle departs from a target track. If the estimated current position departs from the target track, steering angles of the wheels are controlled according to the departure amount in order to correct the departure from the target track.

Respectfully submitted,

William E. Curry

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Date: 24 January 2006

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PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO					Complete if Known		
					Application Number	(Nail Phase of Porty (AM0464)	
	INFORMATION DISCLOSURE				Filing Date	(Herewith)	
	STATEMENT BY APPLICANT (Use as many sheets as necessary)			PPLICANT	First Named Inventor	Tomohiko ENDO	
					Art Unit	(Unassigned)	
				necessary)	Examiner Name	(Unassigned)	
	Sheet	1	of	1	Attorney Docket Number	476/131	

	U.S. PATENT DOCUMENTS						
Examiner	Cite No. ¹	Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
Initials *		Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document			
	1	US-5,742,141	04/21/98	James L. CZEKAJ			
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	FOREIGN PATENT DOCUMENTS					
Examiner	Cite No.1	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
Initials*		Country Code ³ – Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Date MM-DD-YYYY	Applicant of Cited Document		T ⁶
	1	JP 2002-308313 A	12/21/90			
	2	JP 10-264839 A	10/06/98			
	3	EP 1 297 999 A2	04/02/03	AISIN SEKI KK		
	4	EP 0 872 402 A2	10/21/98	HONDA GIKEN KOGYO KK		
	5	DE 199 40 007 A	03/08/01	ROBERT BOSCH GMBH		
	6	EP 1 249 379 A2	10/16/02	DAIMLER- CHRYSLER AG		
	7	EP 1 361 458 A1	11/12/03	VALEO SCHALTER UND SENSOREN GMBH		
	I					

Examiner Signature	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and Texaminer: Initial if reference considered, whether of not citation is in conformance with MPEP 509. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. #496899